

**AMENDMENTS TO SPECIFICATION:**

Page 6, last paragraph, replace with the following:

-- Fig. 2(a) is an end plan view of the rotating bar gamma camera of FIGs. 1a and 1b:

Fig. 2(b) shows an alternative embodiment of Fig. 2(a); and--;

Page 10, last paragraph through to page 11:

-- Although the preferred embodiment of the invention includes photodetectors at each end of each scintillation bar, an alternative embodiment of the rotating bar detector as shown in Fig. 2(b) would collect light at only one end of the bar, with an optimal surface treatment 204 at the other end of the bar, such as a reflector, a diffuse surface treatment, or other surface treatment that optimizes light collection by the photodetector.

This would reduce electronics complexity and cost to a bare minimum, but with the tradeoff of degraded energy resolution as less light would be collected for each event, as no energy correction based on event spatial location would be possible. The invention having been described, it will be apparent to those skilled in the art that the same may be varied in many ways without departing from the spirit and scope of the invention. Any and all such modifications are intended to be included within the scope of the following claims. For example, while the invention has been described with respect to a nuclear medicine application, the novel imaging camera may have applications in other areas, such as scanning very large volumes with minimal crystal material — e.g., scanning for radioactive material or for explosives using the (n, $\gamma$ ) reaction which causes nitrogen rich material to emit high energy gammas.--.